

**Amendments to the Specification**

On page 1, please insert before the heading "BACKGROUND OF THE INVENTION" the following new heading and paragraph:

-- CROSS-REFERENCE TO RELATED APPLICATION

This application is a Divisional of U.S. Application No. 09/209,060, filed December 9, 1998, which is hereby incorporated in its entirety by reference herein. --

On page 1, please replace the paragraph beginning at line 17 with the following rewritten paragraph:

-- Magnetic disk drives are used to store and retrieve data for digital electronic [[apparatuses]] apparatus such as computers. In Figures 1A and 1B, a magnetic disk data storage [[systems]] system 10 of the prior art includes a sealed enclosure 12, a disk drive motor 14, a magnetic disk 16, supported for rotation by a drive spindle S1 of motor 14, an actuator 18 and an arm 20 attached to an actuator spindle S2 of actuator 18. A suspension 22 is coupled at one end to the arm 20, and at its other end to a read/write head or transducer 24. The transducer 24 typically includes an inductive write element with a sensor read element (which will be described in greater detail with reference to Figure 1C). As the motor 14 rotates the magnetic disk 16, as indicated by the arrow R, an air bearing is formed under the transducer 24 causing it to lift slightly off of the surface of the magnetic disk 16, or, as it is termed in the art, to "fly" above the magnetic disk 16. Alternatively, some transducers, known as "contact heads," ride on the disk surface. Various magnetic "tracks" of information can be read from the magnetic disk 16 as the actuator 18 causes the transducer 24 to pivot in a short arc as indicated by the arrows P. The design and manufacture of magnetic disk data storage systems is well known to those skilled in the art. --

On page 3, please replace the paragraph beginning at line 24 with the following rewritten paragraph:

-- Other spin valve read sensors have been developed which use a multilayer pinned layer in place of the single pinned layer 46 of Figure 2. Such a pinned layer 46' is shown in Figure 3, formed of a first ferromagnetic (FM) layer 54 that is separated from a second FM layer 55 by a

non-magnetic spacer layer 56. Specifically, such a read sensor has been developed with the first and second FM layers formed of cobalt and the spacer layer formed of ruthenium (Ru). The magnetization 57 of the first FM layer is set in a first direction, while the magnetization 58 of the second FM layer is set in a second direction that is substantially antiparallel to the first direction. The two FM layers are strongly antiferromagnetically coupled in an antiparallel orientation, and their magnetizations are pinned by the pinning layer 48. Thus, the magnetization of the pinned layer [[53]] 46' is significantly resistant to perturbation by the external magnetic fields used to change the magnetization 41 of the free layer 42. --

On page 6, please replace the paragraph beginning at line 4 with the following rewritten paragraph:

-- In yet another embodiment of the present invention, a method of forming a magnetoresistive device~~[[,]]~~ includes providing a substrate and forming a synthetic AFM layer having a first iron (Fe) layer and a second iron (Fe) layer separated by an iron-silicide (FeSi) layer. The formation of the synthetic AFM layer can include depositing a first Fe initial layer over the substrate, depositing a silicon (Si) layer over the first Fe initial layer, and depositing a second Fe initial layer over the Si layer. The method also includes heating the first Fe initial layer, the Si layer, and the second Fe initial layer until material from at least one of the first Fe initial layer and the second Fe initial layer propagates into the Si layer to transform the Si layer into the FeSi layer. Alternatively, a combined layer of Fe and Si can be deposited on a first Fe initial layer and covered with a second Fe initial layer. The combined layer is heated to form the FeSi layer. A pinning layer can also be formed between the substrate and the synthetic AFM layer. This method produces a read sensor that experiences high saturation fields while requiring reduced spacer layer thickness control during fabrication. Also, the formation of the iron-silicide spacer layer can be conducted at temperatures and for time periods consistent with the field annealing procedure of the pinning layer. --